

Mercedes-Benz EQ Formula E Team



ABB FIA Formula E Season 2019/20



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We look forward to the challenge of demonstrating the performance of our intelligent electric-battery-powered drives in motorsport, too, and giving positive energy to the EQ brand.

Toto Wolff
Head of Mercedes-Benz Motorsport



EQ
FORMULA E TEAM

»»

Mercedes-Benz EQ Formula E Team.

Motorsport has been a core element of business at Mercedes-Benz for 125 years. The first vehicle to bear the Mercedes-Benz name was a racing car.

Mercedes-Benz is lining up in Formula E in the 2019/20 season

The Mercedes-Benz EQ Formula E Team benefits from the brand's many years of experience in motorsport and its technical know-how from Formula 1 and DTM. At the start of the sixth season of the ABB FIA Formula E Championship, Mercedes-Benz is beginning a new chapter in its long and successful motorsport history: at the start of the 2019/20 season, two fully electric racing cars from the new Mercedes-Benz EQ Formula E Team will race for the first time.



Ian James

Team Principal Mercedes-Benz EQ Formula E Team

Born 10th November 1977 in High Wycombe (UK)

Studies Bachelor of Engineering, Coventry University (UK)

Marital status Married to Claire with two children, Cameron (10) and Chloe (8)

Lives in Marlow (UK)

Career

2001–2005 Manufacturing Engineer at McLaren Automotive Ltd.

2005–2008 Project Lead, Production Planning at Daimler-Chrysler AG

2008–2011 Manager, Finance and Controlling at Plant Tuscaloosa, Alabama (DAG)

2011–2015 Head of Programme Management, Mercedes-AMG High Performance Powertrains, UK

2015–2018 Senior Manager, Marketing/Communications and Governmental Business, Mercedes-Benz G-Class

since 2019 Team Principal Mercedes-Benz EQ Formula E Team



The drivers.

Nyck de Vries

Profile

Born	26 March 1992 in Kortrijk (Belgium)
Marital status	Single
Lives in	Monaco
Height	1.77 m
Weight	65 kg
Hobbies	Karting, cycling
Internet	www.stoffelvandoorne.com

Statistics Formula E

Debut	Ad Diriyah 2018 (P16)
Starts	13
Wins	- (best result: P3)
Podiums	1
Pole Positions	1
Points	35
Best Championship	P16 (2018/19)

Career

1998–2009	Karting
2010	F4 Eurocup 1.6: Champion
2011	Formula Renault 2.0 Eurocup: P5
	Formula Renault 2.0 Northern European Cup: P3
2012	Formula Renault 2.0 Eurocup: Champion
	Formula Renault 2.0 Northern European Cup: P9
2013	Formula Renault 3.5 Series: P2
	McLaren Young Driver Programme
2014	GP2 Series: P2
	Formula 1 (McLaren): Test Driver
2015	GP2 Series: Champion
	Formula 1 (McLaren): Test Driver
2016	Formula 1 (McLaren): Test Driver + 1 Race
2017	Formula 1 (McLaren): P16
2018	Formula 1 (McLaren): P16
2018/2019	Formula E (HWA RACELAB): P16
	24h Le Mans (LMP1): P3
2019/2020	Formula E (Mercedes-Benz EQ Formula E Team)

Stoffel Vandoorne



Profile

Born	6 February 1995 in Sneek (Netherlands)
Marital status	Single
Lives in	Sneek (Netherlands)
Height	1.67 m
Weight	58 kg
Hobbies	Water sports, skiing, tennis
Internet	www.nyckdevries.com

Statistics Formula E

Debut	Ad Diriyah 2019
Starts	-
Wins	-
Podiums	-
Pole Positions	-
Points	-
Best Championship	-

Career

1999–2011	Karting
2012	Formula Renault 2.0 Eurocup: P5
2013	Formula Renault 2.0 Eurocup: P5
2014	Formula Renault 2.0 Eurocup: Champion
	Formula Renault 2.0 ALPS: Champion
2015	Formula Renault 3.5: P3
2016	GP3 Series: P6
2017	Formula 2: P7
2018	Formula 2: P4
2019	Formula 2: P1 (after 16 of 24 races)
2019/2020	Formula E (Mercedes-Benz EQ Formula E Team)





A look behind the scenes.

The Mercedes-Benz EQ Formula E Team will join the electric racing series for season 6 (2019/20), drawing on the know-how and combined motor racing experience of the entire Mercedes family.

Mercedes-AMG High Performance Powertrains:

The heart of the new car will be developed at Mercedes-AMG High Performance Powertrains (HPP) in the UK. The Brixworth technology hub is the Daimler Group's global centre of excellence for high-performance hybrid technology. HPP has set the benchmark for hybrid expertise in Formula One for many years. The team is now capitalising on its expertise with high-performance electric motors to develop the powertrain for the Formula E team.

The in-house engineers have been working on challenging high-performance projects for more than a decade, including the original KERS Hybrid system in Formula One and the SLS AMG Coupé Electric Drive electric super sports car, which was developed jointly with Mercedes-AMG. However, it is the expertise acquired during the development journey of the current F1 hybrid power unit that will form the cornerstone of the Formula E technical project.

HWA AG: HWA AG already has experience in the electric racing series. The developer has supported the Monaco-based Venturi team since the start of the fifth season (2018/19) in the role of technical partner. At the same time, HWA AG has fielded its own Formula E team in the shape of HWA RACELAB with a driver line-up of Stoffel Vandoorne and Gary Paffett. This involvement has given the team important racing practice with the new second-generation cars that have been used since season five.

Mercedes-AMG Petronas Motorsport:

The reigning Formula One world champion team Mercedes-AMG Petronas Motorsport will also play a supporting role. The Brackley-based team has won five drivers' world championships and four constructors' championships, all with hybrid power, in the past five years.

The right preparation is key: On the path to the racing debut in the ABB FIA Formula E Championship, it is not only technical expertise that is decisive, but also the right preparation. 'The combined expertise of the Mercedes-Benz family in Affalterbach, Brixworth and Brackley provides the perfect basis for our new Mercedes-Benz EQ Formula E Team. I can't imagine a better combination to approach a project like this,' said the Head of Mercedes-Benz Motorsport, Toto Wolff.





The new Mercedes-Benz EQ Silver Arrow 01

New racing series, new challenge, new racing car: curtain up for the Mercedes-Benz EQ Silver Arrow 01! In early March of this year, the team's first all-electric racing car saw the light of day at the International Motor Show in Geneva, decked out for the occasion in a special 'teaser livery'.

Later that month, the car went for its first track outing at Varano in Italy. Further test drives took place over the next few months in Italy and Majorca. Incidentally, when the new ABB FIA Formula

E Championship campaign begins, the brand with the three-pointed star will be the only automotive manufacturer in the world to compete in both Formula 1 and Formula E.

By contesting the two racing series in parallel, Mercedes aims to transfer the lessons from both to its road vehicle production. The two platforms combined will constitute a major technology driver for the entire Mercedes family and help to shape the future of the automobile.

Until the new Silver Arrow 01 makes its race debut in the season opener at Ad Diriyah towards the end of November, the team and its two drivers Stoffel Vandoorne and Nyck de Vries have some milestone moments ahead of them and, above all, a lot of work.

'Formula E will be a totally new playing field for us,' Toto Wolff emphasises. 'But we look forward to the challenge of demonstrating the performance of

our intelligent electric-battery-powered drives in motorsport, too, and giving positive energy to the EQ brand.'



The car and the technology.

The teams can prove their technical expertise in the development of the powertrain.

Chassis

All Formula E teams use a standard chassis. For season 5, 2018/19, Spark Racing Technology developed a completely new racing car specially adapted to the requirements of the electric racing series. The Gen2 car has a futuristic design which is unique in the world of motorsport and is much admired. A large rear-mounted diffuser provides down-force instead of the rear wing usually found on formula racing cars. Fans and the media have christened the Gen2 car the 'Batmobile' because of its amazing appearance.

Battery

The McLaren battery supplied as standard is at the heart of every Formula E racing car. Located between the driver's seat and the powertrain, it weighs 374 kg, giving a minimum vehicle weight of 900 kg. The maximum power that can be delivered to the motor is limited to 54 kWh and is monitored by the FIA. Battery charging takes about 45 minutes.

Tyres

In view of Formula E's ideas about sustainability, all teams use 18-inch, all-weather tyres from an exclusive supplier, Michelin, in both dry and wet conditions. Each driver has a maximum of four front and rear tyres per event at his disposal, so two sets of rubber must last right through from shakedown to the end of the race.

Power

The Formula E car's powertrain consists of inverter, motor, transmission, rear-axle components and energy management software. Unlike the rest of the vehicle, teams are free to develop these parts as they see fit. The Gen2 car produces its maximum power of 250 kW in qualifying mode and when using FanBoost. In the race itself, power is limited by the regulations to 200 kW. The racing car can accelerate from 0-100 km/h in about 2.8 seconds and reach a top speed of around 280 km/h.

Brakes

Gen2 cars use a brake-by-wire system, similar to Formula One, in order to improve the efficiency of battery recuperation. The operation of the brake pedal is decoupled from the transmission of power to the rear axle and regulated by an electronic control unit (ECU) which measures how much force the driver is exerting on the brakes and the amount of braking effect available from recuperation. The entire braking system is supplied by Brembo and includes bespoke carbon discs and pads, machined monobloc aluminium calipers, bells & tandem master cylinder. The carbon discs measure 278 mm on the front axle and 263 mm at the rear.

Safety

The Gen2 racing car meets the FIA's highest safety standards, having a carbon-fibre monocoque. CFRP crash structures to the front, rear and sides afford the driver the maximum degree of safety possible. Additional protection for the driver's head is provided by the halo system, with which we are all familiar from other FIA formula racing series. A special feature in Formula E is the LED lighting integrated into the halo. The halo lights glow blue for Attack Mode and purple for FanBoost.





Facts about the racing car.

Acceleration 0–100 km/h



Approx. **2.8** sec.

Top speed



max. **280** km/h

Capacity / charging time



52 kw/h **45** min.

Power in training / qualifying



max. **250 (340)** kW (h.p.)

Power in races

max. **200 (272)** kW (h.p.)

Minimum weight



900 kg

FanBoost



max. **250 (340)** kW (h.p.)

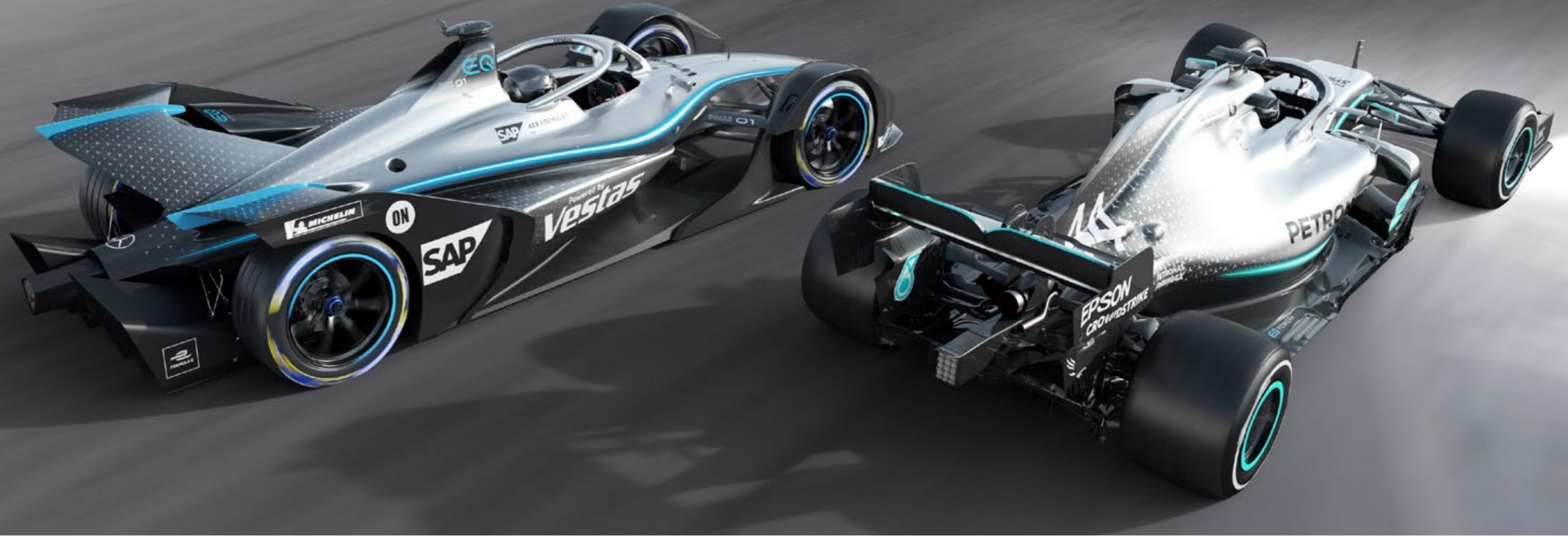
Attack Mode



max. **235 (319)** kW (h.p.)

Ride height 75 mm (max.)





How Formula E and Formula 1 generate valuable synergies.

One big family: Formula 1, Formula E and series production can benefit mutually from their combined experience.

Mercedes is the only car maker involved in both Formula 1 and Formula E this year. Is that a contradiction? Not for the brand with the three-pointed star, because the company does not see Formula 1 and Formula E as rivals; on the contrary, the two race series should go hand in hand, developing synergies with one another.

From a marketing point of view, the two series go their separate ways in order to showcase the company's motor racing DNA to different target groups.

In any case, motorsport provides an amazing opportunity to give the brand a spin of emotion and excitement.

There's the premier class of motorsport with its long tradition, the electric race series and the commitment of Mercedes-Benz. Formula 1 is Mercedes' biggest marketing platform with 733 million fans worldwide and racing in 21 different countries. For the Mercedes brand, Formula 1 represents the ultimate challenge in terms of teamwork, resource management, technology, performance and competition.

Of course, Formula E has racing at its heart, but this series represents a new adventure, a fresh challenge for the Mercedes-Benz EQ Formula E Team, starting in season 6. The electric series should open up a new target group for the brand as it seeks to move with the spirit of the times, making sense of the changes taking place in the automotive industry and the electrical revolution. Formula E is a marketing and lifestyle platform which appeals to a young, urban audience. At the same time, through their enthusiasm for racing, this new target group can be introduced to EQ technology. Both series thus serve two different purposes as regards to marketing while still being connected by the technologies deployed.

And so, in Formula E, the project will build on experience gained by Mercedes over the past couple of decades in Formula 1. The power unit for the Formula E car currently being developed in Brixworth at Mercedes AMG High Performance Powertrains (HPP) is a prime example of this. Since 2007, HPP have gained a solid grounding in the field of hybrid technology, ranging from batteries to electric motors. The first KERS system for the 2009 Formula 1 season and the hybrid power unit for the hybrid era in use since 2014 were manufactured at Brixworth.

It is at this juncture that Formula E development work comes into the equation, because broadly speaking, in engineering terms, the inverter, which is a key component of a Formula E electric motor, is simply a larger version of the MGU-K from a Formula 1 power unit. Much of the knowledge and experience gained in Formula 1 can, as a result, be transferred to the new Formula E project. In future, though, insights gained in Formula E will also flow back into developments for Formula 1, resulting in a transfer of knowledge in both directions.

Of course, know-how from the two mainstays of the racing programme will also be transferred back to the parent company, thereby influencing the design and manufacture of series production vehicles in future.

For years, Formula 1 has been the perfect place to experiment with new technologies in a competitive environment, with batteries and energy management systems, for example, to ensure that electrical energy can be recovered and made available without the driver being distracted from the actual task of driving.

The ongoing development of aerodynamics also has a direct influence on key areas of the automotive landscape, producing improvements in handling and tyre management, for example. Connectivity is another key area in Formula 1 where valuable insights with implications for road vehicles are being gained. Formula 1 cars are probably the most highly connected vehicles in the world. The team have been working on 5G technology to download and upload data from the car ever since the 2017 season.

Wireless transmission to the pits commences as the car travels along the pit lane. A superfast uplink, transmitting data at download speeds of up to 1.9 gigabytes per second, springs into action as soon as the car is within four metres of the pits. In other words, the transfer of one gigabyte of data takes less than five seconds. But this technology does not exist solely in Formula 1. The race series was used as a high-speed test bed, putting the technology to the ultimate test. In future, similar technologies will be used in smartphones and find their way into networked vehicles that can communicate with the outside world.

A great deal of knowledge can be transferred from motor racing to the road as a result. After all, both areas pursue the same goals as regards to the most efficient use of energy available, for example. In Formula 1, the flow of fuel has been regulated at a fixed rate during races since the 2014 season. In Formula E, it's the capacity of the battery that is its counterpart, the deciding factor. In both instances, the team face the challenge of how to most effectively use a set amount of energy to extract maximum performance.

As far as that goes, in Formula 1, for example, some of the total output is sacrificed to find the best compromise between fuel consumption and lap times and finishing the race as quickly as possible.

The key factor is this interplay between different areas.

However, it's important to bear in mind that the transfer of knowledge and technology is not about installing a component from a racing car into a road-going vehicle without modification.

You cannot simply install the brakes from a Formula 1 car in a normal car. It is the learning process, the methods and the insights that can be gained in Formula 1 and Formula E and how they can then be transferred to the world of road vehicles that are paramount. In this way, tools used in Formula 1 and the aero-dynamic lessons learned from digital prototypes, simulations and CFD modelling can find their way onto the road. The methods we deploy to build the best racing cars in the world enhance the processes by which we develop the world's best road-going vehicles.



The Formula E platform.

Formula E is about more than exciting motorsport: the electric racing series very quickly established itself as a pioneer of technological innovations, sustainability and electromobility.

Concept

The ABB FIA Formula E Championship is the world's first all-electric formula race series. Racing takes place on specially designed street circuits in the centres of major cities. In this way, the race is brought directly to spectators – and not the other way around. At the same time, electromobility is presented precisely in that urban context, in which it is very much at home. Consequently, Formula E can combine exciting racing with pioneering environmentally friendly ideas. The construction of permanent new racetracks is totally unnecessary. Spectators are encouraged to arrive by public transport or electric vehicle.

Objectives

Formula E does its bit to allow electromobility to become a global reality, and wants to address young new target groups in the process. The brand core of Formula E comprises values like sustainability, efficiency, innovation and technological progress. The electric racing series presents the automotive industry with a huge playing field and an integrated competitive environment. While the action-packed races and feel of the event address and involve the audience directly, future generations are encouraged to live in a sustainable way. In this way, the development of innovative technologies for electric vehicles can be driven forward just as easily as promotion of improved air quality in cities and actively battling against climate change.

History

The first ever E-Prix took place 13th September 2014 in Beijing. The race was won by former Formula One driver Lucas di Grassi, who became the first of the four Formula E champions to date. A lot has happened since the launch of the race series. In season 5 (2018/19), Formula E introduced a brand-new Gen2 car which points the way to the future with its aggressive, futuristic design and much-improved electrical engineering. The introduction of the Gen2 car means that the previously mandatory change of vehicle in the middle of the race is no longer necessary. In season 6, twelve teams, each with two drivers, will go head to head at 14 race meetings in twelve cities on several continents.





Future

Formula E affords many premium car manufacturers a highly competitive platform on which to test technologies for the road and to advance the design and functionality of components for electric vehicles. Apart from electric motors, the focus is also on the connectivity of vehicles and on fully integrated smart cities, including the development of wireless charging technology.

Previous Formula E Champions

Season	Champion driver	Champion team
2014/15	Nelson Piquet jr.	NIO Formula E Team
2015/16	Sébastien Buemi	Renault e.dams
2016/17	Lucas di Grassi	Audi Sport ABT Schaeffler
2017/18	Jean-Éric Vergne	DS Techeetah Formula E Team
2018/19	Jean-Éric Vergne	DS Techeetah Formula E Team

All Previous Formula E Winners

Position	Driver	Wins
1	Sébastien Buemi	13
2	Lucas di Grassi	10
3	Sam Bird	8
4	Jean-Éric Vergne	8
5	Nicolas Prost	3
6	Felix Rosenqvist	3
7	Jérôme d'Ambrosio	3
8	Nelson Piquet jr.	2
9	Daniel Abt	2
10	António Félix da Costa	2
11	Robin Frijns	2
12	Edoardo Mortara	1
13	Mitch Evans	1



The Formula E racing event.

Rules and procedures in Formula E differ from other racing series such as Formula One in certain key areas. The main sporting rules at a glance:

Dates 01

The Formula E calendar consists of twelve race weekends, each with its own very special event character. The season usually starts in late November or early December and ends in July of the following year, so a Formula E season runs over two years, as in football. Races are held on five different continents with sustainability playing a key role in planning the calendar and transportation routes.

 22 NOV ADR R1 Ad Diriyah, SA	 23 NOV ADR R2 Ad Diriyah, SA	 14 DEC TBC R3 tbc	 18 JAN SCL R4 Santiago, CL	 15 FEB MEX R5 Mexico, MX
 01 MAR HKG R6 Hong Kong, CN	 21 MAR TBC R7 tbc., CN	 04 APR RME R8 Rome, IT	 18 APR PAR R9 Paris, FR	 03 MAY SEO R10 Seoul, KR
 30 MAY BER R11 Berlin, DE	 20 JUN NYC R12 New York, US	 25 JUL LDN R13 London, GB	 26 JUL LDN R14 London, GB	R3 tbc.

Events 02

Almost all E-Prix are one-day events, where all the sessions (except the shakedown), from the free training to the race, take place on the same day. That means Formula E provides the audience with a concentrated hit of racing action in one go, with no time wasted between sessions. There is also a busy additional programme of events for the whole family, focusing on electromobility and future technologies.

Saturday

- Qualification group 1
- Qualification group 2
- Qualification group 3
- Qualification group 4
- Super Pole (top 6)
- Autograph session
- E-Race
- Drivers' presentation
- Grid procedure
- Race (45' + 1 lap)
- Podium ceremony

Street races 03

Almost all races take place on temporary city courses set up in major cities all over the world. In this way, Formula E attracts new target groups by coming right to the audience in cities such as New York, Berlin, Paris and Hong Kong. At the same time, the angular street courses pose unique challenges for the drivers and engineers.





1.	25
2.	18
3.	15
4.	12
5.	10
6.	8
7.	6
8.	4
9.	2
10.	1

Points system 04

The top ten in each E-Prix secure points towards the drivers' and team championships. Points are awarded to the top ten finishers according to the system of 25 - 18 - 15 - 12 - 10 - 8 - 6 - 4 - 2 - 1 familiar to everyone from Formula One. Extra points are also awarded for pole position (3 points), the fastest driver in the group phase of qualifying (one point) and the fastest race lap (one point). In order to get the extra point for the fastest race lap, the driver must finish in the top ten, otherwise, the point goes to the driver in the top ten with the next-fastest lap time.

Extra points for pole: 3

Additional point for being fastest in the group phase of qualifying: 1

Extra point for fastest race lap: 1

FanBoost 05

Formula E has relied on interaction with viewers since its debut season. In an online vote, fans can vote until 15 minutes after the start of the race on which five drivers should receive the 'FanBoost'. The drivers can then use it to increase the power of their car for a short period in the second half of the race as part of an overtaking manoeuvre. The FanBoost is displayed by purple illumination on the halo.

Online vote

Start: six days before race
End: 15 mins after race start

Vote result

Top five receive FanBoost in next race

Use of FanBoost

In second half of race
(after 22 mins)

Additional energy

100 kJ (min. 240 kW/
max. 250 kW)

LED light on halo

Purple



Attack Zone

Activation zone is designated off the racing line



Usage times

Duration and time allocation determined about an hour before start



To activate

Press button and drive over 3 activation strips in the 'Attack Zone'



Power

235 kW in Attack Mode instead of usual 200 kW available in Race Mode



Activation attempts

5



LED lights on halo

Blue

Attack Mode 06

Season 5 saw the introduction of Attack Mode, another tactical element to enable drivers to gain more power to attack or defend their position. As a reward for taking a slower line through a corner, the electric motor's power is increased to 235 kW for a short space of time. In order for this to happen, a special 'Attack Zone' is set up at a suitable place off the racing line, depending on that track's particular characteristics. In order to activate Attack Mode, the driver must press a button on the steering wheel and then drive over the three activation strips off the ideal line in the 'Attack Zone'. If he succeeds, then Attack Mode is immediately activated and additional power made available. Each driver has five attempts to activate Attack Mode. The FIA determines how Attack Mode will be deployed just before the start of the race; for example, for two periods, each lasting four minutes or for eight minutes. The LEDs on the halo glow blue once Attack Mode has been activated. From season six, Attack Mode cannot be activated during a yellow phase, i.e. only under normal racing conditions.



Energy management 07

Starting with season six, even more emphasis will be placed on energy management. This means that, during safety car deployments and yellow phases, a fixed amount of energy (corresponding to 1 kWh per minute) will be deducted from the available total energy of the car. Contestants can therefore save energy by driving slower during an SC or yellow phase. This change puts energy efficiency at the forefront.



This is what happens on a race weekend.

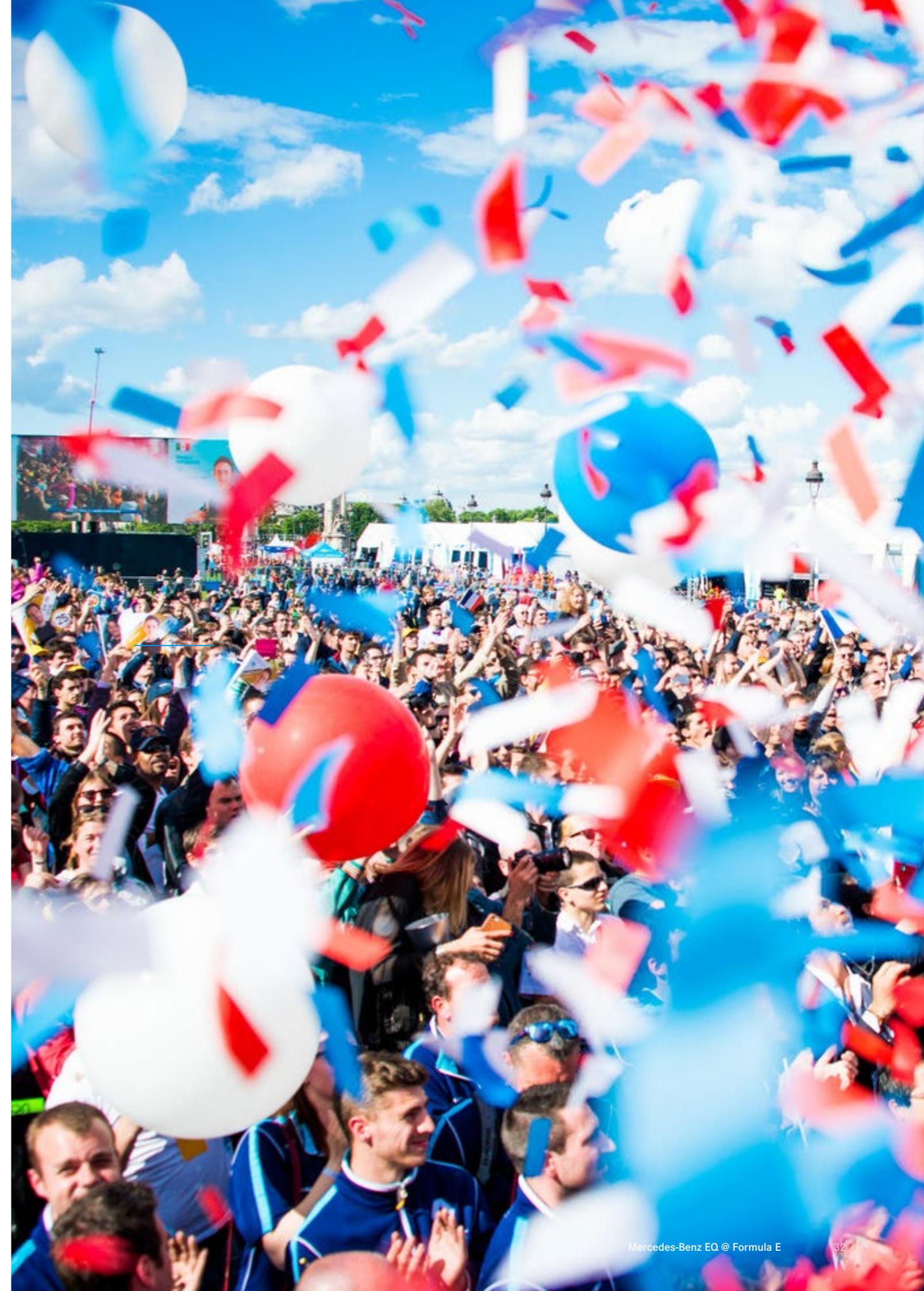
The format of a Formula E race weekend is perfectly organised and compact. All sessions with the exception of shakedown, which is held the day before the E-Prix, usually take place on race day.

Shakedown

At most E-prix meetings, the first test of functionality is held on Friday, the day before the race. During the 30-minute session, drivers and teams check the car's electrical systems and its reliability. Engine power is turned down to 110 kW so that cars drive at reduced speed. Drivers can only post six laps. Shakedown also gives the FIA an opportunity to check the circuit and the kerbs and get feedback from drivers in the briefing that follows.

Practice

Race day starts with two practice sessions lasting 45 and 30 minutes respectively. Drivers and teams can tune their cars to suit the track and develop a feel for the circuit at full power. The two practice sessions are the first timed sessions of the weekend. On a double-header race weekend, there's just one 45-minute practice session on the second day.



Qualifying

Qualifying determines the grid order of the cars in the E-Prix. In the first segment, the field is divided up into four groups of some six drivers or so according to their position in the championship standings. For the first race of the season, however, grid order is decided by where they finished the previous season overall. Each driver can post a maximum of two hot laps, only one of which is at full power of 250 kW. The six fastest from the group stage progress through to the Super Pole Shoot-out, while the drivers from seventh place downwards start the race from where they qualified.

Super Pole

The Super Pole is an individual time trial for the top six drivers from the qualifying session that has just taken place. The sixth-fastest driver from the group stages is the first to go out on track and the fastest is the last. The drivers go out on track one by one and can only head out from the pit lane once the previous driver has begun his flying lap.

Races

The E-Prix lasts 45 minutes plus one lap. Cars set off from a standing start and do not post a formation lap. The cars' performance is limited by regulation to 200 kW. However, Attack Mode (235kW) and FanBoost (250kW) offer drivers two extra ways of gaining a strategic advantage. The top three appear on the podium when they receive their awards after the race.



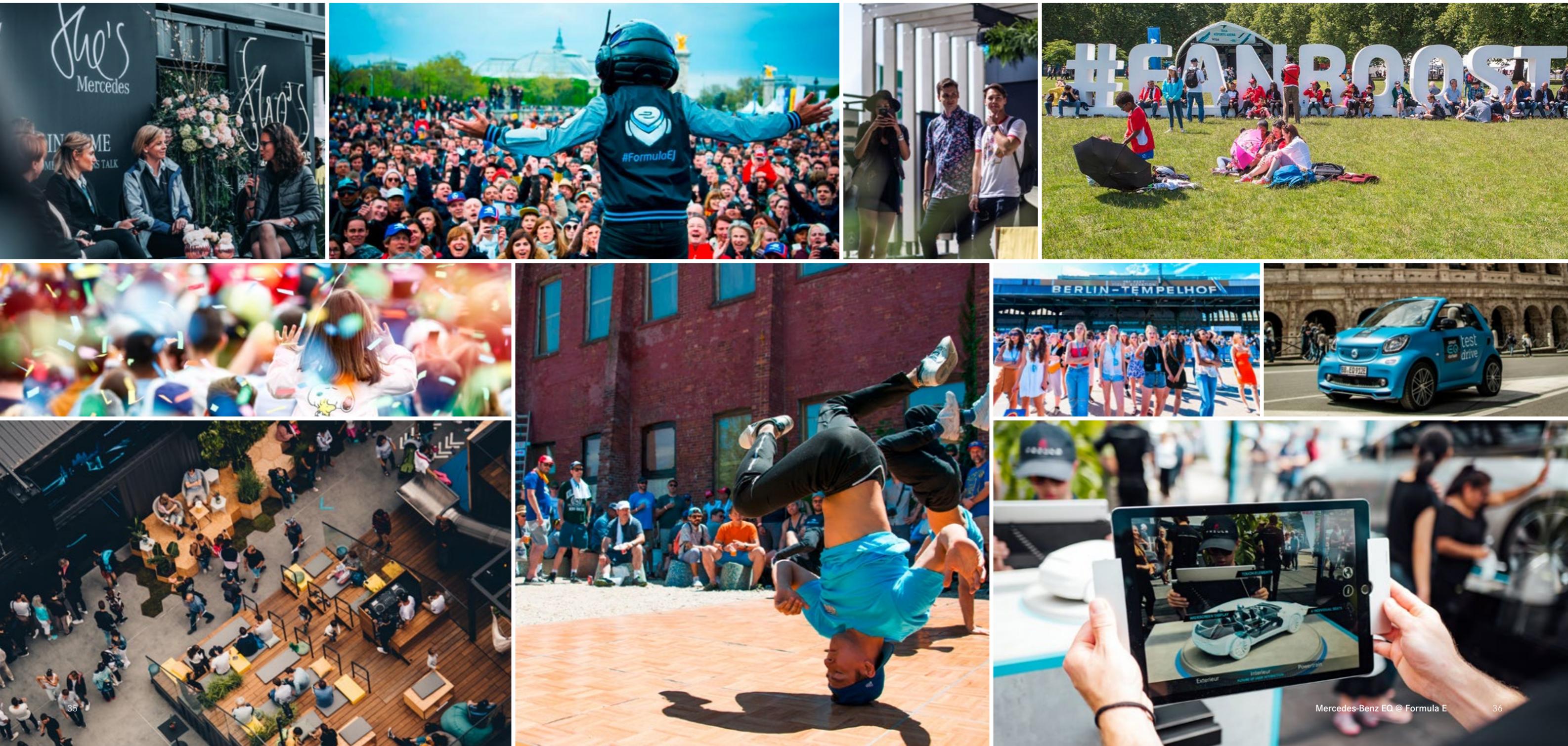


Marketing and lifestyle platform.

The FIA Formula E platform is not just about motorsport. It is all about a new, young and urban target group, a lifestyle shift, and the major cities where the races take place.

Above all it is the desire to sustainably change the world of mobility by driving forward the development of fully electric vehicles and new technologies.

For Mercedes-Benz, Formula E has the potential to be one of the most important marketing and lifestyle platforms in the world. This platform is currently developing a lot of momentum – as of December 2019, Mercedes-Benz will be part of Formula E on the racetrack, together with the Mercedes-Benz EQ Formula E Team on the constructor side.





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Into the future with Electric Intelligence.

The Mercedes-Benz EQ Formula E Team will take part in its first ABB FIA Formula E Championship race in the competition's sixth season (2019/20).

Mercedes-Benz and its new technology brand EQ have already been involved as a partner in the E-Prix in Rome, Paris, Berlin, Berne and New York City since season 5.

The name EQ stands for 'Electric Intelligence' and is derived from the brand values 'emotion and intelligence'. The EQ brand covers all essential aspects of

customer-oriented electromobility and goes beyond the vehicle itself. The spectrum ranges from electric vehicles, wall boxes and charging services to home energy storage devices.

For the Mercedes-Benz EQ Formula E Team, the term 'EQ' represents an integral element of the team name, which will bring 'Electric Intelligence' to the starting grids of the ABB FIA Formula E Championship as of its sixth season.

**Electric Intelligence
by Mercedes-Benz.**



For the EQ brand, Formula E is a strategic partner and therefore much more than just a motorsport event. It is an exciting lifestyle festival that makes young, urban-oriented people aware of us and gets them excited about the brand.

Britta Seeger
Member of the Management Board
of Daimler AG.
Mercedes-Benz Cars Sales.



Principal partners.

Vestas



Vestas is the energy industry's global partner on sustainable energy solutions. We design, manufacture, install and service wind turbines across the globe, and with more than 105 GW of wind turbines in 80 countries, we have installed more wind power than anyone else. Through our industry-leading smart data capabilities and unparalleled more than 86 GW of wind turbines under service, we use data to interpret,

forecast and exploit wind resources and deliver best-in-class wind power solutions. Together with our customers, Vestas' more than 24,500 employees are bringing the world sustainable energy solutions to power a bright future.

We invite you to learn more about Vestas by visiting our website at www.vestas.com

SAP



All around the world, leading technology from SAP is changing sports and entertainment by helping to boost performance on the track and field, creating all-new experiences for fans, and simplify processes for teams, leagues and event venues.

Mercedes-Benz has been a trusted SAP business partner for many years. Both companies stand out in being open to new approaches and innovations. SAP's involvement with the Mercedes-Benz EQ Formula E Team combines conventional marketing and technological sponsorship. In addition to having its company logo featured on the vehicles and drivers, SAP will provide access to its innovative technologies for the Mercedes-Benz EQ Formula E Team.

As the Official Business Performance Partner, SAP supports the Mercedes-Benz EQ Formula E Team with back-office solutions and new innovations for the racing team based on SAP® technology. SAP and the team's engineers can use the SAP HANA® business data platform to develop technology solutions that help the team analyse large volumes of data and monitor overall performance. The engineers can also use additional features and functions provided by the SAP Cloud Platform and SAP Leonardo technologies, including Internet of Things (IoT), predictive and machine learning capabilities during the co-innovation process.

For more information please visit our website at www.sap.com



Suppliers.

ON Semiconductor

ON Semiconductor®



ON Semiconductor is a proud supplier of the Mercedes-Benz EQ Formula E Team and looks forward to working with the team in developing next-generation electric powertrain innovations for cutting-edge performance and efficiency.

Vehicle electrification will be a key technology to emission-free transportation. ON Semiconductor has all the core technologies for vehicle electrification which improves efficiency in the vehicle powertrain resulting in safer and better-performing EV/HEV automobiles.

ON Semiconductor products and solutions for high-voltage power conversion and management include insulated gate bipolar transistors (IGBTs), gate drivers, rectifiers, super junction MOSFETs and controllers as well as wide-band-gap (WBG) developments in silicon carbide and gallium nitride. These are all highly relevant to applications in next-generation electric vehicles, as well as technologies developed for, and refined and proven in racing applications.

ON Semiconductor (Nasdaq: ON) is driving energy efficient innovations, empowering customers to reduce global energy use. The company is a leading supplier of semiconductor-based solutions, offering a comprehensive portfolio of energy-efficient power management, analogue, sensors, logic, timing, connectivity, discrete, SoC and custom devices. The company's products help engineers solve their unique design challenges in automotive, communications, computing, consumer, industrial, medical, aerospace and defence applications.

Learn more at www.onsemi.com

New Era



Since 1920, New Era has been hand-crafting the finest headwear in the world. With a licence portfolio including some of the world's biggest teams across a range of sports, the brand is the market leader rooted in sports and lifestyle culture, making it the first choice of headwear partner for the new Mercedes-Benz EQ Formula E Team. As part of a brand-new multiple-year deal, New Era-branded caps will form part of the official team kit worn by the Mercedes-Benz EQ Formula E Team, debuting for season 6 at the ABB FIA Formula E Championship race in November 2019.

The official caps will be worn by both Mercedes-Benz EQ Formula E Team race drivers, as well as the Formula E mechanics, engineers and travelling race team. The six-style range of authentic headwear is set to be made available online and in New Era stores worldwide, providing all our fans with the chance to support their favourite team throughout the upcoming 2020 season.

For more information please visit our website at www.neweracap.com

Tommy Hilfiger



With a brand portfolio that includes TOMMY HILFIGER and TOMMY JEANS, Tommy Hilfiger is one of the world's most recognised premium designer lifestyle groups. Its focus is designing and marketing high-quality men's tailored clothing and sportswear, women's collection apparel and sportswear, kids' wear, denim collections, underwear (including robes, sleepwear and loungewear), footwear and accessories. Through select licenses, Tommy Hilfiger offers complementary lifestyle products such as eyewear, watches, fragrance, athletic apparel (golf and swim), socks, small leather goods, home goods and luggage.

The TOMMY JEANS product line consists of jeanswear and footwear for men and women, accessories, and fragrance. Merchandise under the TOMMY HILFIGER and TOMMY JEANS brands is available to consumers worldwide through an extensive network of TOMMY HILFIGER and TOMMY JEANS retail stores, leading speciality and department stores, select online retailers, and at www.tommy.com.

Alpinestars



Alpinestars, the world's premier motorsports performance protection manufacturer, has been racing at the highest levels of motorsports for more than 55 years and partnering with the world's best drivers and teams in championships from Formula 1, Formula E, WEC and NASCAR to WRC, and in events like the Dakar, giving Alpinestars technical staff unrivalled access to a testing programme that pushes technology to the absolute limit, both on and off the track.

Alpinestars never rests on its laurels in the quest for excellence. By pursuing innovation through technology research, design and development, its state-of-the-art facilities in the US

and Europe fuel a worldwide racing development programme to ensure Alpinestars remains in pole position as a global force in every major motorsport series. One goal. One vision. To deliver driver and team products which offer reduced weight, improved breathability and comfort combined with the ultimate in performance and protection for racing at the highest level of technology.

Please find more information at www.alpinestars.com

A close-up, low-angle shot of the front of a Mercedes-Benz Formula E race car. The car's body is covered in a pattern of the three-pointed star logo. The lighting is dramatic, with strong highlights on the front bumper and hood, and deep shadows on the side panels.

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